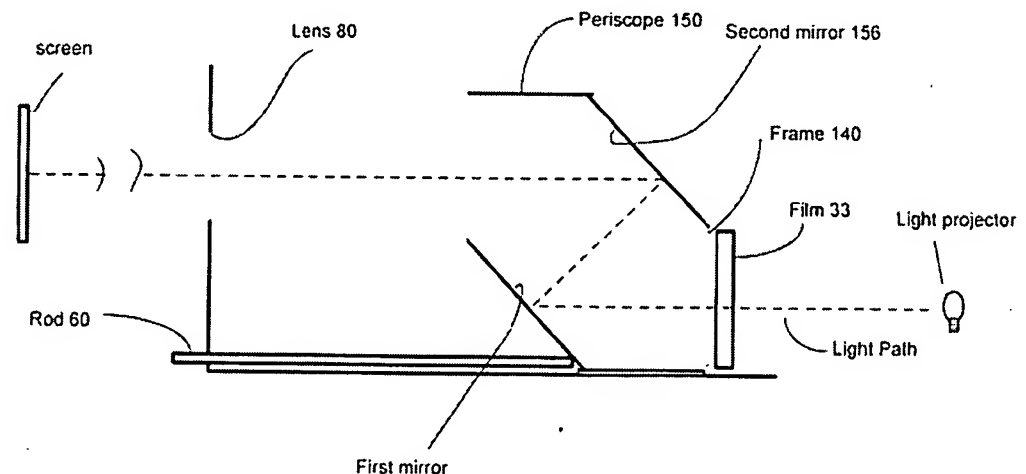


Remarks:

Applicant appreciates the allowance of claims 12-19. Applicant also appreciates the Examiner's time in a telephone conference on October 27, in which Applicant's attorney sought to understand the Office Action better so she could prepare a clear response. No agreement was reached regarding the claims in this case.

Three main references were relied upon in the Office Action – Meng-Suen, White, and Kyhl.

U.S. Patent No. 6,702,445 "Meng-Suen" teaches a projector that uses a periscope and mirrors to increase the focal length of the projected image. As shown in the sketch below, light enters from the right side, passes through the film 33 and through an opening in the frame 140, is reflected off of a first mirror and then a second mirror 156, and then out the lens 80 to the external screen.



Schematic 1

U.S. Patent Application 2003/0174292 "White" teaches a mechanism that allows two remote users to communicate visually with each other. Looking at Figure 6 of White, there is a camera 3 and a projector 6. There is a screen 7, and there are two mirrors 9, 2, with the mirror 2 being a two-way mirror. As described beginning in paragraph 77, the projector 6 projects the image of the remote user onto the mirror 9, which reflects that image up to the screen 7. The local user 1 looks forward toward the two-way mirror 2, which reflects the image projected on the screen 7 so the reflected image appears to be in the position 10.

The image that appears to be in position 10 is of the remote user, who appears to be sitting in the chair 11. The camera 3 is then looking directly at the local user 1 and is projecting that person's image through a projector in the same type of set-up at the remote location. "This configuration results in an apparent eye contact with the image of the remote person because the line of sight of the remote person is matched by the line of sight of the camera 3." There is a matte black panel 13 covering the projector 6 and the table 15 to prevent the camera 3 from picking up the images of the table and projector.

U.S. Patent 5,025,320 "Kyhl" teaches a podium that allows the speaker to see his paper or other material, which is also captured by a camera 44, which transmits the image electronically to a projector outside the box which projects it onto a screen outside the box. Referring to Figure 2 of Kyhl, the printed material or other material 41 lies on a platform. The image of the material 41 reflects off of a two-way mirror 36, onto a reflector 48, to the camera 44, which captures the image and then transmits it electronically to a projector. The person standing at the podium has a line of sight 37 through the two-way mirror 36 to the material 41.

Claim 1 is as follows:

An image transfer device, comprising:
a box including walls defining an inlet opening and an outlet opening;
a screen;
a first mirror, said first mirror being a two-way mirror and having first and second sides, wherein said openings, screen and first mirror are aligned such that, when an image is projected through said inlet opening and is reflected off of said first mirror onto said screen to form a screen image, the screen image can be viewed by looking through both said outlet opening and said first mirror.

The Office Action rejects this claim, saying that the Meng-Suen reference comprises a box including walls defining an inlet opening and an outlet opening, a screen, and a first mirror, wherein the openings, screen and first mirror are aligned such that, when an image is projected through the inlet opening and is reflected off the first mirror onto the screen to form a screen image, the screen image can be viewed by looking through both the outlet opening and the first mirror. This is not correct.

In Meng-Suen, the inlet opening is the opening in the frame 140 adjacent to the film 33, and the outlet opening is the opening at the lens 80. The mirror 156 would correspond to the "first mirror" in the claim, since it is the mirror that reflects the image onto the screen to form a screen image. That image cannot be viewed by looking through both the outlet opening and the first mirror, as recited in claim 1, because it is not possible to look through the first mirror 156.

The mirror 156 is housed in the periscope 150, which has opaque walls that do not transmit light, so changing the mirror 156 to be a two-way mirror, as suggested in the Office Action, would not change its function. It still would not be possible to see the screen image by looking through the mirror 156 due to the opaque housing of the periscope.

The Office Action also states that the Kyhl reference provides an image transfer device wherein, when an image is projected through the inlet opening and is reflected off of the first mirror onto the screen to form a screen image, the screen image can be viewed by looking through both the outlet opening and the first mirror. That is not the case.

In Kyhl, the image of the material 41 is projected through the inlet opening 26 and is reflected off of the two-way mirror 36 onto the reflector 48 to the camera 44, which transmits the image electronically to an external projector that projects the image onto an external screen (not shown). Even if the reflector 48 were considered to be a screen, the image on the reflector 48 cannot be seen by looking through the mirror 36.

Thus, the prior art references, taken either individually or together, do not teach what is recited in claim 1.

Claim 2 recites:

An image transfer device as recited in claim 1, and further comprising a means for controlling the tilt of said first mirror to enable centering of an image on said screen.

The Patels reference states in column 3, lines 8-10 that it may be desirable to provide for an adjustment of the mirrors, but it does not teach any adjustment means. Simply stating that adjustment of the mirrors would be desirable, without teaching any particular adjustment mechanism, is not sufficient to serve as a basis for obviousness.

Claim 3 recites:

An image transfer device as recited in claim 2, wherein said means for controlling the tilt includes a first biasing means to urge the tilting of said first mirror in a first direction, and a second biasing means to urge the tilting of said first mirror in a second direction.

The Patels reference does not teach any biasing means for adjusting the position of the mirror.

Claim 4 recites:

An image transfer device as recited in claim 3, wherein said first biasing means comprises a spring, and said second biasing means comprises a screw.

The Patels reference does not teach the use of a spring for tilting the mirror in a first direction and a screw for tilting the mirror in a second direction, as it does not teach any biasing means at all or any adjustment mechanism at all.

Claim 7 recites:

An image transfer device as recited in claim 5, wherein said first and second mirrors and said screen are located inside said box so as to define a first light path, which extends through said inlet opening and onto said second mirror, a second light path, which extends from said second mirror onto said first mirror, and a third light path, which extends from said first mirror and onto said screen such that said first and third light paths are substantially parallel to each other.

None of the references Meng-Suen, White, or Kyhl teach a screen located inside a box as claimed. In Meng-Suen, the screen would be outside of the box. In White, there is no box. In Kyhl, the screen is located outside the box. Also, none of the references teach the first, second, and third light paths as recited in this claim.

Claim 8 adds a fourth light path, which also is not taught or suggested.

Claim 11 recites:

An image transfer device as recited in claim 10, and further comprising:
a projector platform aligned with said inlet opening, including means for adjusting the pitch and roll of said projector platform; and
a recorder platform aligned with said outlet opening, including means for adjusting the pitch and yaw of said recorder platform.

The section of Meng-Suen, col. 9, lines 7-27, which was cited as a basis for showing the elements of this claim, does not show them. That section states:

Thus, in the present embodiment, light is projected from light source 78 out of the semi-spherical reflector 68 toward the film assembly 36, with the semi-spherical reflector 68 being substantially aligned with the frame 140. The light passes through the film 33 as the film 33 is scrolled horizontally about the rollers 40 by the action of the motor 46. The light then passes through the frame 140, which defines the shape of the projected beam (and thus the projected image), before entering the periscope 150 through the first aperture 152. After the light beam is shifted by the first and second mirrors, it exits the periscope 150 through the second aperture 158. The light beam then passes through the

lens 80, with the distance between the lens 80 and the film 33 in the film path being variable with the movement of the film assembly 36 along the track 39. The lens 80 focuses the light beam so as to be projected on a target surface to form the images from the film 33. The formed target images scroll across the target area as the film 33 is moved by the motor 46. The images may be focused by sliding the post 60 in and out of the housing 12 to vary the distance between the film assembly 36 and the lens 80.

This reference does not teach a projector platform, including means for adjusting the pitch and roll of the projector platform, and a recorder platform aligned with the outlet opening, including means for adjusting the pitch and yaw of the recorder platform as stated in the Office Action. It also does not teach a motor that contributes to means for adjusting the claimed pitch and roll and pitch and yaw. The only motor which is referred to in that section is the motor 46, which serves the function of advancing the film. Meng-Suen does not even contemplate using a recorder but rather involves projecting an image onto a screen.

Since all the claims recite an invention that is both novel and unobvious in view of the prior art, Applicant respectfully requests allowance of all the pending claims. If there are any other problems, Applicant's attorney would appreciate a phone call from the Examiner to help expedite their resolution.

Respectfully submitted,



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